# THE CANNON

The Official Newspaper of the University of Toronto Engineering Society, Est. 1977

Vol. 12 Sept. 6, 1994 No. 1

# To Serve and Collect

With a camera firing at a rate of two frames per second, the sound of the shutter has become the sound of money. For some time now, Ontario drivers have been under the lucrative eye of photo radar.

During a trial run on the 403, forty-one cars were caught exceeding a one hundred twenty kilometre per hour "speed limit", within a time period of thirty-five minutes. This translates into over three thousand dollars for that trial, and for a full eight hour shift, about fifty thousand dollars. The present quota for an OPP officer is four hundred tickets per shift, but plans are presently in the works to double this. With a machine capable of up to fifty-five thousand shots per shift, this is a trivial load. The

provincial government expects this new cash grab to generate \$130 million a year. The OPP is planning to increase this to \$1 billion a year—beyond that, citizens would revolt, or take the bus.

The fleet of photo radar mobiles consists of four *Chevy Astro* minivans, each with a large strobe light attached to the roof. The "paparazzi" will park on the shoulder of the road or in hidden and illegal areas, such as behind bridge abutments. Two of the four Astros are capable of taking pictures while moving, but it is more worthwhile to stand still—more cars pass a stationary point.

Judging from other drivers' reactions, a common sentiment is that photo radar has been introduced for cash generation, not driver safety. Shortly after the implementation of photo radar in Calgary, highway fatalities increased by 26%. This suggests that at least with highway conditions, not speed, but rather impulse, is the main culprit in fatality rates. Only on the safest, busiest, and fastest of Ontario highways will you find speed being enforced by photo radar. All the province cares about is how fast your car was moving, and how much money that will translate into: at this stage, demerit points are not being issued to car owners, and insurance companies are not being informed of photo radar felonies.

20.00 F!rosh Nite



After the picture is taken, the film is processed and sent to a provincial offence notice production centre. Digital images of the licence plates are taken from the negatives and sent on a computer tape to the Ministry of Transport where the photos are combined with information on the owner. About three weeks after the original shot was taken the licence plate owner receives her unwanted Kodak moment: the package will contain two pictures of the car, one normal and one close-up of the licence plate. Speeders have fifteen days to demand a trial in person, or pay the fine, otherwise a provincial credit bureau is notified.

If you have the time to fight, then exercise your rights—with enough people demanding trials, the courts will become backed up. At 6400 tickets per day this should happen quickly enough, but the province has made fighting a ticket very inconvenient. One non-trial strategy is to plead guilty, with an explanation to the Justice of the Peace (JP). If you were speeding because of a medical emergency, the fine will likely be waived.

If you want to exercise your full rights, then ask for "full disclosure" of the evidence being brought against you when you meet with the prosecution in advance. Ask for the full, original picture, and check for other cars in the image. Also.

request that the photo radar operator. and the charging officer be present for the trial—say that you wish to cross-examine the photo radar operator on his training, and the charging officer on the process of producing the picture. Also, ask for statements of the testimony to be given in court—the "will says", and for the operator's notes, which were to be taken when it was realized that you were speeding.

If everyone shows up, make sure that you have questions to ask of them all. Ask the radar operator about the device and photo radar in general—for example, about the cosine error in the parking of the vehicle. Photo radar is very sensitive to the alignment of the van with respect to the direction of traffic—the camera

measures speed by comparing angles, and if the van is angled too far toward the roadway, the car will traverse a greater arc in a shorter time. Ask for proof that the van was parked properly. Also ask the operator if he can calculate actual speed from the computed speed to prove the quality of his training. However, before you do this, obtain copies of the photo radar operator manuals when you meet with the prosecutor.

Another approach could take an ethical standpoint: arguing that photo radar has been implemented only to generate revenue. For instance, check to see if out of country or province drivers are charged in the same manner (they are not). This will show the questionable attitude which the province displays toward "safety". Use the phrase "inequality before the law" when things are going your way, and you might just win. The prosecutor may present a counter argument of "public safety"; you must be prepared to show her wrong.

Most JPs see photo radar as a mockery of civil rights, and will be more lenient for these cases. Remember, politicians introduced photo radar to Ontario—the legal system was left to deal with it.

Vince Luciani MECH 9T7

### ORIENTATION SCHEDULE Tuesday Wednesday Friday Thursday Saturday Sunday 10.30 Football Game in 09.00 Paramount Canada's 09.30 EPT/TPT 09.00 Classes Begin 12.00 Bed Races Guelph Wonderland-09.30 Convocation 10.30 Pep Rally 12.00 Lunch with your 11.00 Lunch and Tour Department 18.00 Scavenger Hunt 12.00 Shinerama and 14.00 Flrosh Photo Adopt-a-Highway 17.30 WIC Wine and-Cheese 15.00 F!rosh Olympics 17.00 Dinner

# **NEWS & VIEWS**

# I Am. Canadian?



The summer of 1994 generated a truly international atmosphere in Toronto. First we had the World Cup of Soccer in the United States, just one country away, and then the World Basketball Championships in our own backyard. Our world is already a global village, with athletes like the Shaq and Baggio known across the globe. We should, however, remember that we have a family in the global village, a country called Canada. In a city like ours where clapping at a Blue Jays game is as close as we get to doing the wave, it was a nice change to see St. Clair West filled with red, white, and green and the herds yelling ITAL1A! or BRASIL! on College Street. We are a multicultural community and take great pride in being so. Diversity is what this country is all about; every culture is distinct, be it Newfoundland, Quebec, or the Northwest Territories. As distinct as we are we should all remember that Canada is our country and the one thing that is common to all Canadians is the pride of being Canadian: like the commercial says, "I am". During the recent Basketball Championship games, however, the inevitable question had to be asked: are we really proud of being Canadians?

I had the pleasure of attending the Canada-Greece match at the Maple Leaf Gardens last month and the question of loyalty must have been on everyone's mind. How could the fans of Canada be outnumbered by the Greek fans? After examining the situation I came up with two possible reasons. Either a massive shipment of Greek fans arrived in Toronto for the game or the Canadians of Greek decent decided that their loyalty is with the Greek team rather than with Canada. The first option was ruled out while I was watching the game since the Greek fans were speaking perfect English. This left me with the second option. I still wonder what caused them to cheer Greece over Canada. 1 wouldn't have been bothered by the cheering but when they booed Canada and yelled at people waving the Canadian flag, there is a problem with loyalty. We are patriots-quiet ones, yes-and maybe that's what keeps us, as a country, out of trouble. However, there comes a time when we must realize that there is nothing wrong with cheering for Canada because after all, we are Canadians.

Arrin Katz ENG SCI 9T7

# The Drive for Acceptance

I am starting a movement for a greater acceptance of the diversity in our faculty. In the past, I have mainly spoken out against racism and sexism, but, they are no longer my only concerns.

As a person of colour (of South-Asian descent), I have been treated differently on many occasions by people who have said that, based on my race, they knew much about me, even if we had never met. Some people associate certain racial backgrounds with secret agendas, immorality, or corruption.

These experiences have motivated me to work against some people's tendency to prejudge others. Often, informative discussion, along with exposure to actual members of a particular group can break down widespread negative stereotypes.

Last year, along with several other students of both genders, I helped run a workshop on women's issues. I drew on my experience with racial discrimination to help me better relate to the challenges that women face in dealing with sexism.

This year, I plan to raise awareness of an issue that no one is currently confronting. It is a hateful, insidious, type of prejudice that goes practically unnoticed and unchallenged among Engineering students on a daily basis, mainly because it is aimed at a group that has remained invisible, until now.

The issue is homophobia. The affected group includes anyone who has ever felt as little as a strong friendship for someone of the same gender or as much as a romantic attraction.

A recent study will be published in the next edition of *The Archives of Sexual Behaviour*, a medical journal. It was conducted by a team of American doctors, led by David Wopij of the Harvard Medical Institute. They found that the percentage of people who report some same-sex attraction since age 15, when combined with the number who report same-sex intimacy within the last five years, is 20.8% of men and 17.8% of women. The 1993 Engineering enrolment statistics, suggest that over 500 of us will be personally affected by homophobia this year. Even those who doubt the accuracy of this number must consider that, as long as it is higher than zero, we are hurting

some of our own friends.

In our present, intolerant environment, if friends of the same-sex appear to be "too close", they risk suspicion that they are gay, lesbian, or bisexual. While there is nothing inherently wrong with these identities, some people associate them with certain undesirable traits (such as secret agendas, immorality, or corruption). In this way, prejudices can introduce feelings of guilt for something as innocent as friendship.

Homophobia makes the very discussion of same-sex relationships unacceptable unless they are being ridiculed or condemned. In this light, it is easy to see why people choose to remain "in the closet".

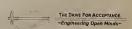
In talking to students from various years and departments I've found that most of them believe that none of their friends are lesbian, bisexual, or gay. Somehow, they have lost sight of the fact that a person's preferences (music, colour, style, gender, etc.) are not necessarily discernable from their appearance.

Unfortunately, remaining "closeted" is a simple task. Were it not possible (due to bright purple skin, for example), homophobes would find themselves ostracizing some members of their family, neighbours and friends unless they challenged their belief in the superiority of heterosexuality.

People who feel the need to conceal their sexual orientation, do so quite easily. While it involves little more than censoring their words and actions, and hiding offence at insulting comments, leading this kind of double life takes its toll on a person's self-image and limits the ways they can interact socially.

No one should feel pressured to lie to their friends. For everyone who has helped me over the past few years through the hills and valleys of life and for those who are still afraid that their friends will never understand them, this is for you. It is for all of you, as much as for myself, that I am finally coming out.

Vernon Naidoo MMS 9T4+1+P



# U of T Walking Machine Strolls to Victory

Four U of T mechanical engineering students walked off with top honours at this year's International Walking Machine Decathlon in Pittsburgh, Pennsylvania.

Of the seven engineering schools from across North America entered in the May competition. U of T's Rail Runner, the only Ontario entry, scored 9839 points of a possible 10 000. Second place scored only 5050 points.

"Ours was a landmark win," team captain Devon Ostrom said," because it was the first time in the competition's eight-year history that a walking machine designed by a student team completed all 10 events." Executed on a 9m x 9m playing field, the competition comprised a variety of dashes, slalom races, and stairclimbing events. Six of the

10 events allowed use of a tethered joystick; the remaining four demanded autonomous navigation.

Ostrom and team mates Singee Cheah, Larry Samone, and Brian Leavens also won best mechanical design and best new design, and tied for best overall design.

Standing 86 cm high, Rail Runner features modular components, an on-board microcontroller with a custom interface, optical encoders for motors and joints, and a double-redundant electrical system for optimal reliability.

Reproduced from Engineering Dimensions, 1994, Volume 15, No. 4, page 12, by permission of the publisher.

# THE C&NNON

# EDITORIAL

# Words from the Editor-in-Chief



Editor-in-Chief Germain Beaudoin

Assistant Editor Jack Bennett

Layout Editor Adrienne Chee Hing

> News Editor Arrin Katz

Features Editor Vince Luciani

Sports Editor Idene Attaran

Art Director TBA

Ads Manager Anthony Boulos

Distribution Manager TBA

> Photography Amir Meidan

> > Staff

### Information

The CANNON is a monthly publication of the University of Toronto Engineering Society, with a circulation of 4000 copies throughout the U of T St. George campus. The mandate of the CANNON is to publish information that is pertinent to the interests of the engineering student body.

Subscription information is available by contacting Julie Wilkinson at the Engineering Society at (416) 978-2917.

Advertising rates, production deadlines, and other pertinent information can be obtained by contacting the Engineering Communications office at (416) 978-5377.

### Disclaimer

The CANNON is a vehicle through which undergraduate engineering students can express their opinions. The views expressed herein are those of the author and do not necessarily represent those of the editors or the Engineering Society unless so indicated.

Correspondence
THE CANNON
Editor-in-Chief
10 King's College Road
Sandford Fleming Building Rm B670
Toronto, Ontario
MSS-1A1
Tel: (416) 978-5377
Fax: (416) 978-1245

Many students feel a great deal of apathy towards the Engineering Society, the body that is supposed to represent them. This is partially due to the fact that the Engineering Society appears to be a clique. This is true, to a certain degree, but this is inevitable since whenever you have a group of people who work together over an extended period of time, they develop stronger relationships with one another. The close-knitedness among Engineering Society Council members makes the atmosphere in the Engineering Society somewhat intimidating. This makes it seem difficult for people to get involved.

The Engineering Society, as a whole, actually welcomes and encourages people to get involved. Some Engineering Society Council members don't feel that it's their individual responsibility to encourage people to get involved and that it is your responsibility to take the initiative. As a result, this year has probably seen an all time low in

student participation with most of the Engineering Society elected positions being acclaimed, including the President!

This student apathy and non-involvement can partially be attributed to the fact that people don't know what the Engineering Society does. This is because the Engineering Society Council relies on the class reps to disseminate information to the masses. Unfortunately, there are a number of class reps who run or are elected as a joke. These people don't take seriously their responsibilities as class rep and so they don't bother to inform their classes.

In an attempt to remedy this, the Cannon will contain notices of upcoming meetings and events that Engineering Society committees are planning to have. This does not absolve class reps from doing their job, its simply a method of increasing reader awareness of the Engineering Society. The Cannon will also publish monthly reports from both the

President and Vice President External of the Engineering Society. This will keep students informed as to what the two highest ranking members of the Engineering Society do. Although this will not make people fountains of Engineering Society knowledge, it is a start.

Those looking for more information on what the Engineering Society has to offer can reference their F!rosh Handbook or better yet come and talk to a student in one of the Engineering Society offices and find out what attracted them there and why they keep coming back. We don't bite. Promise.

Germain Beaudoin CHEM 9T6 + P



# **Meditations On A Decadent Society**

Canada is considered to be the one of the most favourable places in the world to live. The opportunities here are immense, if one is willing to seek them out and work hard. However, many Canadians, especially those who were born here, have come to regard our standard of living as a sort of birthright, something to which we are entitled without regard to circumstances. This high—perhaps even decadent-standard of living to which it is very easy to become accustomed does not exist without negative effects. Canada, according to many sources, produces the largest quantity of garbage per capita of any nation in the world. Our food consumption, well beyond adequate, is so rich and so immense that heart disease, cancer, and overweight have become common afflictions, increasing the cost of disease insurance to the already burdened taxpayer. It is clear that our lifestyle cannot be maintained at this level indefinitely.

Henry David Thoreau wrote in Walden about a neighbour of his, a man who worked very hard as a farmer so that he could afford "luxuries" such as coffee and meat. In the meantime, Thoreau himself was farming a small plot of land, writing, eating simple foods and going fishing whenever he liked. Canadians today behave like the

first man: they work long hours and spend most of their money on luxuries which aren't completely necessary. Considering the basic survival needs of an individual—food, water, and shelter—it is obvious that we expect, and have been "conditioned" to expect, a great deal more than that. While it is theoretically possible for one person to live in a private apartment and be self-sufficient for less than nine hundred after-tax dollars per month—slightly more than minimum wage—few would willingly choose to live this way.

It is truly ironic that in such a situation, one would be forced by circumstances to maintain a healthy, low environmental impact lifestyle. Being unable to afford cable television, one's entertainment would be confined to books, or perhaps payas-you-can theatre. An energy-wasting car is obviously out of the question: a Metropass or a bicycle are two possible options for transportation. The foods which one is able to buy would necessarily be cheap: potatoes. vegetables, grains-foods which doctors have been exhorting their patients to eat in quantity for the past twenty years. In effect, one would be making all the "proper" decisionsthe decisions which people are being told they ought to make, either to improve their own health, or their own minds, or to prevent environmental degradation.

Much more difficult, of course, is making these decisions when not forced to do so. As engineers, we are, to a certain extent, expecting professional careers, with comfortable salaries and plenty of goods on which to spend them. It might at first glance seem absurd to live in greater austerity than is fully necessary. However, it is concious, rational decisions like these which will ensure a healthy, sustainable future, and allow us to continue increasing the scope of our knowledge and experience.

Jack Bennett ENG SCI 9T7

The Cannon is intended to be a forum where the students of Skule™ can voice their opinions and/or display their creative talents. We encourage you to do so by submitting letters to the Editor, reviews, poetry, prose (fiction or non-fiction), artwork, or anything else which you would like to see in the Cannon.

CANNON STAFF MEETING: Wednesday, September 13 @ 5:00 p.m. in the Engineering Society Offices

NEW MEMBERS NEEDED! F!ROSH WELCOME! The word 'engineer' has become a buzzword in describing various forms of employment. For example, janitors are now "sanitation engineers" and people who stay home to raise their children and maintain their home are now "doinestic engineers" rather than housewives/husbands or homemakers. This bastardization of the word 'engineer' serves to create greater confusion as to what a professional engineer is or does. In an attempt to counter this, there has been a great emphasis to increase public awareness of the engineering profession. Our feature in this issue of the Cannon focuses on some of the endeavours that people have undertaken in

# DEMYSTIFYING THE ENGINEERING PROFESSION

# CEC 1994 Promotes Public Awareness of Engineering

This year, the University of Toronto hosted the tenth annual Canadian Engineering Competition (CEC). The CEC serves as the final for the Atlantic, Quebec, Ontario, and Western regional engineering competitions. There are five categories in which participants may compete: Entrepreneurial Design, Corporate Design, Editorial Communications, Explanatory Communications, and Extemporaneous Debate.

Students in Entrepreneurial Design must design a marketable product or service not currently available in Canada. Corporate Design competitors must design a solution to a problem currently faced in industry. Editorial Communications entrants must present a viewpoint on the sociological impact of a current technological issue. Explanatory Communications competitors must describe a complicated technical process or issue in terms such that the public or a person outside of their discipline may understand. Extemporaneous Debate participants must debate a previously undisclosed resolution with a minimum amount of preparation.

In addition to awarding prizes to the top three winners of each category, the CEC offers three special awards to recognize excellence in technical ability, social merit, and environmental awareness. This year the competition introduced a fourth special award, the Public Awareness of Engineering Award, to acknowledge excellence in public relations and education.

Throughout the event, competitors present their projects to the public. Any member of the public who observes a presentation may complete and submit an evaluation form. Judging criteria include quality of the presentation, communication skills, and ability of the presenter to convey complex technical information. Judges, dcans, guests of competitors, regional engineering competition organizing committee members, and CEC organizing committee members are not eligible to judge for this award. The winner of the award is the competitor who has the highest ranking, once all the evaluations have been tabulated.

Events such as this generally have low public attendance. This year, however, over one hundred public observers visited CEC 94 thanks to the hard work of llan Kelman, CEC 94 Director of Media, and Kim Luke and the U of T Office of Media Relations. It is hoped that this award will attract more people to come and explore engineering.

Germain Beaudoin CHEM 9T6 + P

# Skule<sup>™</sup> Daze Educates Ontario Students about Engineering

In Ontario, the majority of first-year engineering students come from high schools within the province. In many of these schools, guidance counsellors are uninformed about the programs that universities have to offer, especially engineering. Many students choose to study pure sciences because they don't know what engineering is all about. In an attempt to educate high school students about engineering, the University of Toronto Faculty of Applied Science and Engineering will be hosting Skule<sup>TM</sup> Daze 9T5, A closer look at U of T Engineering.



THE ENGINEER

Students will be given the opportunity to meet professors, students and staff of the faculty and learn more about U of T Engineering. Alumni and internship students who are currently working in industry will also be present so that students can ask questions and gain information about the engineering profession. There are also numerous social activities planned which allow the students to have fun in a less official atmosphere. In addition, a design competition has also been included in the itinerary to give the students the chance to showcase their ingenuity and creativity, as well as have fun.

Information and applications for Skule™ Daze are given to all students who have applied to the faculty and to all high school science departments throughout Ontario, Skule™ Daze 9T5 will allow students who may be interested in science to make an informed and educated choice when they select their university program.

Last year, Skule<sup>TM</sup> Daze 9T4 was extremely successful and all the students who attended left with a better understanding of what engineering is. If you would like to get involved in any aspect of this event then keep your eyes and ears open for the date and location of the first meeting, which will occur sometime in September.

Germain Beaudoin CHEM 9T6 + P

# SchoolNet—Join The Internet Mentorship Program

Scientists, engineers, technologists—we need you! If you are prepared to spend a small portion of your time helping kids learn about the scientific world using the Internet, please volunteer to be an Electronic Innovator for the SchoolNet initiative. We are looking for people to help elementary and high school students not only in the pure sciences, such as chemistry, physics, and hiology, but also in social sciences, like geography, anthropology, and psychology

The aim of the SchoolNet initiative is to give schools across Canada access to the resources available through electronic communications and information technology. The SchoolNet initiative will have 300 schools online as of this fall.

The students exploring this technology would benefit from "long-distance mentors" who

make themselves available electronically through Internet e-mail to answer questions on science, engineering, and technology. These people, called Electronic Innovators, should ideally be working or studying in one of the aforementioned fields and accessible through the Internet.

If you would like more information on the SchoolNet initiative, and on how you can volunteer to act as an Electronic Innovator, please send e-mail to thurns@ccs.carleton.ca. Please include a short description of yourself, including your areas of expertise.

We hope that you will take this opportunity to participate in this exciting and rewarding project.

SchoolNet Support Group

# **ENG SOC INFO**

# News from the **President**

My summer has been full of meetings and conferences. I started off the summer with the first Engineering Society Retreat. We retreated to the halls of the Galbraith building. We discussed problems with Eng Soc and what we should do for the new year 94/95. In June I went to the ESSCO conference. A weekend long conference in Ottawa, where we talked about student apathy, orientation, fund raising and elected the 94/95 ESSCO executive. The other conference I went to was a day long conference about "Bettering the classroom environment". This was put on by the Faculty. They are trying to bring awareness of problems in classroom to professors.

What meetings did I go to? I had plenty of meetings with the Dean, the Vice-Dean, First Year Dean, High School Liaison and the Registrar, plus sitting on various other committees. This past summer much of the Faculty has been focusing on Strategic Planning and planning till the year 2000. So lucky me I got sit on another committee. I sat on the committee for Improving the Community in the Faculty of Applied Science and Engineering.

That was my summer, I hope yours was much better! Enjoy these first few days because the work is going to start building up. Hope you had a great summer, and come see my new yellow office - if I'm in there my door is always open.

Ruby Nayyar IND 9T5

# UNIVERSITY OF TORONTO CAREER CENTRE AND AISEC - TORONTO Present 1.9.9.4 CAREER NFORMATION DAY WOMAN SUTTEMBER 3 11 A.M. - 3 P.M. UNIVERSITY COLLEGE EAST & WEST HALLS INVEST IN YOUR FUTURE COME AND SPEAK WITH EMPLOYERS FOR ALL DISCIPLINES INCLUDING ENGINEERING

# **Greetings from the VP External**

Welcome and Welcome Back to Skule<sup>TM</sup>!! I hope everyone had a great summer break and are ready to have another fun filled year at this glorious institution of higher learning (cough, cough). As I sniffle my way through hayfever season, I'd like to take a teeny tiny amount of your time to discuss this year's events.

As you know, my position of VP External requires me to keep open lines of communication with all other engineering schools in Canada, and Ryerson. So keep your eyes on this space in the months to come to learn about what's going on elsewhere. In addition, I must send delegates to many conferences and competitions held all over, so pay attention to your class reps when they read their announcements!!

This month I am attending the Ontario Engineering Society Presidents' Conference held Sept. 17 & 18 at Crater U. a.k.a. Laurentian, in glorious Sudbury. This fabulous weekend will let me observe the antics of other Ontario Eng Socs. Can a person be luckier?!?!? (Yes, that is a rhetorical question.)

Well, thanks for reading this. Any questions about the above blabbering or anything related to Skule™ (besides work) can be directed to me, my mailbox (although it's kind of shy and may not respond to your query) or to our e-mail account: engsoc@ecf etc. Have a great week!!

Karen Lev CHEM 9T6

# Women's Issues Are A Man's Issues Too

It has been a long standing myth that women's issues are only about women. The fact is that women's issues relate to the actions of men and men's attitudes towards women. The Women's Issues Committee of the Engineering Society will be addressing some of these issues through a workshop to be held later this fall for both male and female students. Earlier in the year—this Thursday at 5:30 p.m.—the Committee will host an event to which all students are invited.

The focus of this workshop will be the "little things"—the subtle messages that are sent without considering the impact, and the purpose will be to make people more aware of how their actions affect those around them. The approach will be through education, discussion and a thought provoking video. In previous years this workshop has caused all participants to re-examine their own beliefs and has educated people on issues that few ever consider. If you are not a man or woman then this need not concern you, otherwise these issues will involve you in some manner.

All students are invited to an introductory wine and cheese party hosted by the Women's Issues Committee, this Thursday at 5:30. Please take some time this fall to come out to WIC events to see what you can learn.

William Leizerowicz MMS 9T5

# Career Information Day: An Employment Committee Co-operative

Among the many exciting clubs, committees, sports teams, and activities that one can participate in through the Engineering Society, there is one that stands virtually unknown, unnoticed, and at times unappreciated!

The employment committee is designed to provide our amazing Faculty with a variety of services. These include job listings, workshops on job hunting techniques, resumé services, and much much more !!! This committee works very closely with an Engineering Employment Liaison officer Terry Johnston to make sure that all those suddenly available jobs go to U of T students and not the competition. Waterloo? Never heard of it! Must be some place up north or something like that !!!

Starting your job search early is very important as we all need 600 hours of practical experience in order to graduate. (If you are in fourth year and you were not aware of this, I would get over to the career centre now !!!) There are no guarantees about PEY so its very smart to have a backup plan.

Throughout the year, as different events come up, look in the Cannon and the Toike Oike as well as the employment bulletin board for dates, times, and locations. The first of two major events to look forward to is Engineering Career Information Day on Monday, September 26. This will be taking place all day and I would strongly encourage fourth year students to attend!

I am in need of some volunteers to come and meet me in the Eng Soc at 8 a.m. to help set stuff up for Career Info Day on Sept 26. Come help me out !!! If you have any questions or would like to talk with me, please don't hesitate to leave a message in the Employment Committee box with your phone number. Ciao!

Julian Wright IND 9T7



2 Manse Road West Hill, Ontario M1E 3T9 TEL: (416) 287-4423 FAX: (416) 287-4410

# **EMPLOYMENT**

# Professional Experience Year -**Education Beyond Books!**

Do you want to expand your knowledge of the engineering profession?

Do you want to improve your chances of finding full-time employment when you graduate from Skule TM?

The Professional Experience Year (PEY) is your opportunity to work for twelve to sixteen months after either your second or third year of school, and gain invaluable work experience related to your academic background, PEY is U of T's alternative to co-op. Instead of alternating 4-month work and study terms, with PEY you will take one

year away school to work for a company such as 1BM Canada Ltd., Bell-Northem Research, Northern Telecom, Falconbridge Limited, Imperial Oil, AMP of Canada, AECL Research, Information Systems

Management Corp., Del Equipment, General Motors, de Havilland Inc., Netron Inc. and many

The Professional Experience Year program was started in the Department of Mechanical Engineering in 1979. Eight second year Mechanical students were placed in work terms with de Havilland, General Motors and Ontario Hydro that year. Since that time, over 800 students from all Engineering disciplines, as well as 77 from students from Arts & Science, have taken the PEY opportunity. 1994 has been a record year for PEY placements-113 Engineering and I6 Arts & Science students started in PEY jobs this year alone! PEY offers a number of great benefits to students:

· You get to experience first-hand what it's like to work in an engineering job, and as a result you will be able to make a better decision of where you want to work when you graduate. "The PEY program is the single best opportunity for U of T Engineering students to learn about their chosen field of study and to earn invaluable practical experience that will help them in their upcoming careers.'

of a student, but of a full-time member of the BNR

· Many PEY students have become the experts on new and ongoing projects, and as such have had to

"By the end of my work term...

I was one of the experts in my

department, and helping to

train newcomers."

act as company's representative to clients, customers, dealers suppliers. PEY is a fabulous opportunity to

develop your self-confidence and hone your interpersonal skills. "My work term at IBM Image was very educational and "practical experience enriching". It has not only enhanced my academic education with practical skill and experience but as well enhanced my personal development toward being a more astute, self-confident and articulate individual."

- · Your PEY job may give you the opportunity to apply the skills and knowledge you have gained in the first two or three years of school to the real world, thus serving to enhance those skills. "Working on real-life engineering problems certainly makes you appreciate the value of some of the things you learn at school. ... I can think of a number of occasions where I actually referred to my old text books to solve some of the problems I encountered [at IBM]."
- · Sixteen months of work experience will look great on your resume when it comes time to look for fulltime employment! "Students who complete a PEY term have a huge advantage over those without relevant work experience when it comes to being

selected as grad interview candidates." (Quote from a human resources manager at a Toronto company.)

 The average salary for PEY students is about \$26,000 per year - it pays to go on PEY!

Find out more about this exciting opportunity! Come to the PEY Information Seminar in mid-October. Watch the PEY bulletin boards (across from the Sandford Fleming cafeteria) for more details, or ask you class representative. Or just visit the PEY Office (SF B740, across from the cafeteria) Monday to Friday, 9am to 5pm. Donna or Jason will be glad to answer any questions you have. We can also be reached by phone at (416) 978-6649, or by e-mail at "pey@ecf.utoronto.ca".

PEY Office—Jason Pilon, X-MMS 9T3

# · In many cases you will be given a tremendous amount of responsibility, so you can be a valuable

### and productive part of your PEY employer's team. "By the end of my work term ... I was one of the experts in my department, and helping to train newcomers. I was able to take a great sense of pride in my work, knowing that it wasn't really the work

# **Employment** Liaison Office

The Engineering Liaison Office markets U of T Engineers to prospective employers and is committed to giving U of T Engineers a competitive edge over engineers from other universities. Specifically, we work to increase the number of fulltime and summer employment opportunities available to U of T engineering students. We organize numerous activities, such as Engineering Career Information Day (September 26th this year), publish a newsletter full of information about engineering employment, and work closely with the Employment Committee Chair (Julian Wright for 94/95) to make engineering students aware of employment opportunities.

Now that you know what Engineering Liaison does for you, here are some things which you can do or yourself. First, visit the Career Centre. Attend our workshops and seminars on subjects such as Resumés and Covering Letters, Interview Techniques, Self-Marketing Skills for Today's Workplace, How to Find Unadvertised Jobs, and Discovering Your Career Options. Have your resumé critiqued in our Resumé Clinic. Get involved in extracurricular activities or volunteer your time (visit our Volunteer Opportunities Board for information) to acquire new skills. If possible, find engineering related part-time and summer jobs (you will gain valuable experience and it will benefit your resumé). If you can't find engineering related positions, look for part-time and summer jobs that will help you acquire the skills you need for success in the job market. Remember to start your job search early. For summer positions start looking around Thanksgiving, for full-time positions start looking NOW. Finally, if you are graduating this year, don't forget to register with the Graduating Students' Employment Service. Get a head start on this process by attending the Graduating Students Employment Service Engineering Job Search Orientation on Wednesday, September 14 at 12:00 p.m. in Room 202 of the Galbraith Building.

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# **SPORTS**

# The Engineering Athletics Assoc.

Well, it is the start of another season, or should I say school year? Time to dig out those gym shoes...I mean...pencils and pens! The start of this school year is actually going to combine both. To combat an environment of dying spirit, the EAA (a.k.a Skule<sup>TM</sup> Athletics) will be hosting the first annual F!rosh Olympics. On the second day of F!rosh week (after Shinerama, Bogdan!) the games will begin with the F!rosh groups parading around King's College Circle to the psychod-up tunes of the BNAD (Is that OK, almighty BNAD Leedur?) Then the games will kick off with a mighty Skule BANG! (I hope) For the next few hours everyone's athletic skills, intelligence, and agility (and patience!) will be tested in a quest to be named the first ever F!rosh Olympic Champions. The activities will be a mix of sporting events like Ultimate Frisbee and "camp-like" games to get everyone (yes, even those non-athletes out there!) involved. So do yourself and your team proud and win ... win ... WIN! (Oh yeah, have fun as well!)

As the year goes on there will be real sports going on: volleyball, basketball, etc. The most important thing to note at this time to sign up NOW. All team sign-ups will be during the first few weeks of school. Some might be much earlier if that sport's season begins immediately. So make sure you come to SUDS for some BEvERages and sign up for your favourite sport. (There you go SUDS management,

my first plug for you this year!) There will be signups during lunch for the first week or two in the Atrium (any volunteers?) After you sign up the team's captain will get back to you regarding tryouts. Remember, if you don't sign up, you can't play... Have a great "athademic" (athletic + academic) year!

Alan Lepofsky MECH 9T4+P



# The Varsity Blues Are Back!

The Vanier Cup champion Varsity Blues are returning this year after a remarkable 1993 season. Head Coach Bob Laycoe commented that the team is "approaching the 1994 season determined to play the same brand of quality, exciting football that the Blues have become noted for." Come out and cheer for the Blues!

### 1994 Schedule

### Home Games:

Laurier Golden Hawks (Saturday, Sept. 17, 2pm; CHCH-TV)

Windsor Lancers (Saturday, Oct. 1, 2pm) York Yeomen (Thursday, Oct. 6, 7pm) McMaster Marauders (Saturday, Oct. 22, 2pm; Homecoming / U of T day)

### Road Games:

Queens Golden Gaels (Saturday, Sept. 3, 2pm) Guelph Gryphons (Saturday, Sept. 10, 2pm; CHCH-TV)

Waterloo Warriors (Saturday, Sept. 24, 2pm) Western Mustangs (Saturday, Oct. 15, 2pm; CHCH TV)

# ENTERTAINMENT

# Concerts of the Summer at the C.N.E.

The first band to use the CNE Grandstand this summer was Pink Floyd! Awesome show. Three days of spectacular lasers and music. The icing on the cake for this concert was the huge disco ball that appeared in the middle of the stadium towards the end of the show and the fireworks that went off. This was an excellent show that was well worth the money paid for.

Next came the Eagles. This was the most expensive concert of the summer and the show was ugh. Nothing too great, you could have stayed home and listened to them on your stereo and had the same effect. At least they had a video screen running so those who sat at the far end of the stadium could at least see something. For Eagles fans I'm sure this was a big treat seeing the band together, but I still don't think it was worth the money they paid.

The opening band at the CNE was the Rolling Stones. Two nights of Mick Jagger strutting his stuff on stage. The second night it rained for the entire show but 60,000 stayed to here them play. They played a lot of their old songs but they didn't play Ruby Tuesday so I was upset about that. Fantastic show, lots of fireworks, the largest video screen you could see from anywhere in the stadium. A great opening for the C.N.E.

Next to follow was Reba McIntyre, the country singer. Her show was excellent. It was very different, because it used a lot of video interaction. Each of her songs was introduced by a video and some included the video in the concert. An

entertaining show that showed that there is more to performing by just dancing or jumping around the stage.

The last show I saw was John Mellencamp, singing all of his greatest hits. His stage set up was quite disappointing, it looked like a 70's layout with disco lights. The singing was great, performance was down. I expected him to be dressed in a pair of black jeans and a black t-shirt but instead he was wearing pleated twill cotton pants and a casual shirt! I could not even tell which one was him on the stage. His violinist/harmonica player was excellent.

This second last weekend of the summer Harry Conick Jr. will be at the exhibition, I hope it doesn't rain like it did last year. I'm sure it will be an excellent show.

The last show for the summer will be Michael Bolton. An audience of screaming women wishing they had hair like him. His show a few years ago was pretty good, but he's also gotten a few years older - I don't know? You'll have to look in another paper for a review on him.

That's it for my summer concert review of CNE Grandstand shows. There's nothing better than watching a concert rain or shine, under the stars down at the EX.

Ruby Nayyar IND 9T5



# ANNOUNCEMENTS

### **FACULTY**

# "Welcome back" from Dean Charles

I am pleased to offer a warm welcome to both returning and new students. While a good number of you have worked in research laboratories in the Faculty over the summer, most of you have been away from Skuletweither working elsewhere or travelling. A special "welcome back" to the over one hundred students who have participated in the PEY program over the past 16-months; I encourage you to enrich classroom discussions with your experience.

Whatever you've been doing over the summer, you are returning with fresh enthusiasm for your studies and the desire to complete another academic year towards your degree. September is that time of the year!

Superficially you will find the Faculty much as you left it. However, under the surface there is intense planning activity underway which will culminate in a "Strategic Plan" for the Faculty by the end of December. A good number of you are already involved and have met external review teams who are evaluating all our graduate and undergraduate programs. I appreciate your ready willingness to contribute to making the Faculty and its programs stronger.

There are three matters I want to raise specifically and ask for your co-operation.

### 1. Security and Safety

The teaching and research laboratories within the Faculty, including computer facilities exist for your benefit and are there as a consequence of financial support from the governments of Ontario and Canada, alumni, and, of course, yourselves both through tuition fees and the special levy. Please respect all these facilities and, in particular, don't compromise security by leaving doors propped open when they should be locked shut. Providing opportunities for intruders to enter not only encourages damage and theft, but also jeopardizes personal safety.

### **DEADLINES**

### PEY

**PEY Information Seminar** 

mid-October (date and time TBA)

Application deadline

Wed, Dec 21, 1994 at 3:00pm

Interviews dates

The weeks of Jan 30th and Feb 6th, 1995 Job offers will be made

Wed, Feb 22nd, 1995

### THE CANNON

Issue	Deadline	Release
Oct 1994	Sep 26, 1994	Oct 4, 1994
Nov 1994	Oct 24, 1994	Nov 1, 1994
Dec 1994	Nov 22, 1994	Nov 29, 1994
Jan 1995	Dec 26,1994	Jan 3, 1995
Feb 1995	Jan 23, 1995	Jan 31, 1995
Mar 1995	Feb 20, 1995	Feb 28, 1995
Apr 1995	Mar 20, 1995	Mar 28, 1995

### Toike Oike

Issue	Deadline	Release
Oct 1994	Oct 14, 1994	Oct 20, 1994
Nov 1994	Nov 11, 1994	Nov 17, 1994
Dec 1994	Dec 9, 1994	Dec 15, 1994
Jan 1995	Jan 13, 1995	Jan 19, 1995
Feb 1995	Feb 10, 1995	Feb 16, 1995
Mar 1995	Mar 10, 1995	Mar 16, 1995
Apr 1995	Mar 30 1995	Apr 6 1995

### 2. Equity Issues

I want to remind you that Federal and Ontario law prohibits discrimination among individuals on the basis of gender, racial or ethnic origin, ancestry, creed or disability. In a large community such as Skule  $^{TM}$  we have to consciously promote a sense of inclusion and mutual respect among all members regardless of gender, ethnic background or sexual orientation. Attitudes and behaviour may be ingrained but they can change. I encourage all of you to show appropriate respect for your colleagues. In this way, we can build upon those personal qualities which make for fine students and citizens.

### 3. Computer Facilities

The computer facilities provided by the Faculty and its Departments are intended for academic purposes only. And feeds through Internet or other networks which are not directly supportive of your academic work are "off-limits" and have no place in the classroom or computing lab. The Director and staff of the Engineering Computing Facility are authorized to deny access to any students who abuse this policy. In this context I call your attention to the Notice of Offence elsewhere in this paper and recommend that you be familiar with all sections of the Code of Student Conduct.

The above three matters are important to us all in building a stronger sense of community within which the teaching and learning that we are all here to accomplish will take place in a positive and constructive environment.

Have a great year! Michael E. Charlès Dean

### NOTICE OF OFFENCE

in the recommendation of the Discoline Appeals Board, I am publishing the following Notice of Illence and the sanctions imposed:

I wo sludents were charged with having contravanced the following sections of the University of Toronto Code of States I Conduct

such instruction, or without just cause.

8.5 (b) No person shall knowneyly gain access to or use any University computed or ester-

8.5 (b) No person shall knowneyly gain access to or use any University computing or internal or external communications locally to which legislate authorization has not been granted. No person shall use such lacility for any commercial, dishortive or unauthorized purpose.
8.7 Min necros shall exceed about

30th students had helped to install and mannan an ESP service which was not an authorized use of the Tugspard' computer system within the Department of Electrical and Computer Engineering in addition, both students knew their University computers should not be used to

The investigating Officer concluded that both, students knew the FSP server was being cited intermisonaby through leternet to upload and download softenies, some of which was copyrighted. Although nesher student obtained personal financial gain, they permitted at least two contracts systems within the University of Forenit to be used in an anatubenced manner and made in

Both students pleaded guilty to the charges. At the divisional hearing, the following samplions were impossed.

A lermal written reprimend to be placed in their files until they graduate and
 Suspension from the Faculty for the months of May and Jane 1994. Approximate the

 Suspension from the Faculty for the months of May and June 1994. Accordingly, the extent date for receiving their Bachelor of Append Science degree would be at the fall convocation.

Upon appeal of these sanctions, the Discipline Appeals Board saw nep power in the Codical Solidated Coditate, or more the first seasoning, and questioned by the Board question of the surprised Pla supprise son fact the months of May and June 1994, and replaced is with a derial of lary service or admittion either of the surfaces at the Juneary of Economic between twelf services are commanded for deplaced by the surface of the Solidate Solidate (Solidate Solidate). The Solidate Solidate (Solidate Solidate) are surfaced pursuant to Section 8.3 of the Codidate (Solidate Solidate).

offences and the sanctions in campus newspapers, with the students' names withheld.

Professor A. Sedra Vice-President and Provint

### **BY-ELECTION**

The position of VP:Finance has become vacant. Nomination forms for the position of VP:Finance will be available from the Engineering Society office commencing Monday, Sept 19th @ 9:00 a.m. Nomination close at 5 p.m. on Monday, Sept 26th. The by-election will take place at the full council meeting on Wednesday, Sept 28th, 1994. For more information please contact the Engineering Society office.

## **CLUB NEWS**

# Chem

This year we are wasting no time as far as events are concerned. In September alone we have planned a BBQ on September 9, a Volleyball Tournament on the 22nd, our Bookswap Smoker on the 14th, and the Club Class Rep Elections between September 26 and 30. The annual Canadian Society of Chemical Engineers (CSChE) Conference will be held in Calgary from October 2 to 6. This year's Chem Dinner/Dance will be held on November 25.

Sandy Grewal CHEM 9T4+1

# Eng Sci

To all the F!rosh, welcome to Engineering; you picked a great place to live for the next four years. To everyone else, welcome back from a summer of (hopefully) freedom to the exciting world of Skule™. Eng Sci has a great year planned. Summer Nites was a great success. Eng Sci will be a stop on the Smoker Crawl on Tuesday, September 13. Club Elections will be taking place the week of September 12. Our incredible Dinner Dance will be held on Saturday, November 12. Mark that date on your calendar, and get tickets while you can. That's all for now.

Aaron Steinman ENG SCI 9T5

# Mech

The first Mech smoker of the year! Pizza! BEvERages! Book Exchange! Come and meet the Club Executive! Tuesday, September 13 at 4:30 p.m. in MB225A i.e. Mech Common Room.

Cathie Kessler MECH 9T5

# Civ

The Civ Common Room has just been renovated, so come check out the new GB422. The lockers in the basement of GB, near the atrium, will be on sale this week in GB138. The annual Dinner/Dance will be held on November 19, 1994.

Mike Cianchetti CIV 9T5

### **SPORTS**

# Women's Varsity Rugby

No Experience Required; All welcome! Beginning on Wednesday, September 7 at 5:30 p.m. on Back Campus. For more information, please contact: Helen Thompson 944-8041, Jessica Thoms 968-6506, Alexa Taylor 281-2652.